

Table 3.1 Sample Analytical Results Summary - Surface Water
Morning Star Mine
Mojave National Preserve, California

Location	Sample ID	Sample Date	DM* ICP*	Total CN mg/l	WAD CN mg/l	Sb µg/l	As µg/l	Ba µg/l	Be µg/l	Cd µg/l	Cr µg/l	Cu µg/l	Pb µg/l	Hg µg/l	Mo µg/l	Ni µg/l	Se µg/l	Ag µg/l	Tl µg/l	V µg/l	Zn µg/l	pH	
Mine Pit	PIT-030200 PIT-030200 H02070106-002	Dec-98	nd	- ^a	nd	nd	nd	nd	nd	nd	nd	nd	6	nd	nd	nd	6.3	nd	61	7.22			
		Dec-98(D)	nd	-	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	20	7.22			
		Mar-00	DM*	nd	-	nd	nd	15	nd	8.45													
		Mar-00	ICP*	-	nd	nd	nd	-	nd	-	-	nd	nd	-	nd	-	nd	-	-	-			
		Jul-02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	13	nd	nd	nd	nd	30	-			
		Heap Leach Pad 1 Discharge	Dec-98	2.2	-	nd	nd	46	nd	nd	nd	940	44	7	nd	100	nd	nd	11.0	nd	17	7.38	
Pregnant Solution Pond	PP1-030200 PPL1-030200 0105-pppipe	Feb-99	7.0	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.68		
		Mar-00	DM*	7.3	1.5	nd	nd	27	nd	nd	29	681	37	nd	1.0	173	nd	nd	nd	nd	nd	8.10	
		Mar-00	ICP*	8.9	0.1	nd	3.2	-	-	-													
		May-01	nd	nd	nd	nd	nd	39	nd	nd	17	770	19	nd	1.0	120	nd	nd	nd	nd	nd	7.94	
		Dec-98	nd	-	nd	nd	73	nd	nd	nd	2,300	78	nd	nd	370	nd	62	nd	14.0	nd	nd	8.08	
		Feb-99	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.30		
Pregnant Solution Pond	PP-030200 PP-030200 0105-ppond	Mar-00	DM*	nd	- ^a	nd	nd	70	nd	nd	2,760	51	nd	nd	382	nd	nd	nd	nd	nd	nd	6.62	
		Mar-00	ICP*	-	-	nd	nd	-	nd	-	-	nd	nd	-	nd	-	nd	-	-	-	-	-	
		May-01	nd	0.5	nd	nd	64	nd	nd	nd	2,700	53	nd	nd	400	nd	nd	nd	nd	nd	nd	8.42	
		Jul-02	1.2	0.2	nd	nd	nd	nd	nd	nd	1,950	30	nd	nd	115	nd	25	nd	nd	nd	20	-	
		Dec-98	-	1.9	nd	nd	73	nd	nd	nd	2,200	110	nd	nd	360	nd	60	nd	17.0	nd	23	7.38	
		Feb-99	-	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.62	
Pregnant Solution Pond Leak Detection System	PPL2-030200 PPL2-030200	Mar-00	DM*	nd	- ^a	nd	nd	92	nd	nd	nd	3,510	84	nd	nd	486	nd	nd	nd	nd	nd	6.62	
		Mar-00	ICP*	-	-	nd	nd	-	nd	-	-	nd	-	-	nd	-	nd	-	-	-	-	-	
		HP2-030200-W3	Dec-98	-	0.3	nd	nd	20	nd	nd	nd	1,400	nd	5	nd	120	nd	10	nd	18.0	nd	13	8.07
		Feb-99	0.2	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.09	
		Mar-00	DM*	0.1	0.2	nd	nd	21	nd	5.9	nd	1,480	22	nd	nd	85	nd	nd	nd	nd	nd	nd	7.50
		HP2-030200-W3	Mar-00	ICP*	-	-	nd	nd	-	5.9	-	-	nd	-	-	nd	-	nd	-	-	-	-	7.92
Heap Leach Pad 2 Leachate Collection System	HP2-030200-W3 HP2-030200-W3 0105-heap2	May-01	0.1	nd	nd	18	nd	nd	nd	nd	1,400	16	nd	nd	78	nd	nd	nd	nd	nd	nd	nd	
		Dec-98	-	1.1	nd	nd	35	nd	5.8	nd	1,600	290	nd	nd	1200	nd	13	nd	8.8	nd	74	8.20	
		Feb-99	1.1	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.18	
		Mar-00	DM*	0.4	0.0	nd	nd	35	nd	nd	nd	1,570	152	nd	nd	615	nd	nd	nd	nd	nd	nd	7.89
		HP2-030200-W4	Mar-00	ICP*	-	-	nd	nd	-	nd	-	-	nd	-	-	nd	-	nd	-	-	-	-	-
		HP2-030200-W4	Dec-98	1.1	-	nd	nd	nd	nd	nd	nd	2,300	260	5	nd	970	nd	16	nd	17.0	nd	56	8.78
Standing Water Pad 2 - Southwest	HP2-030200-W HP2-030200-W5 HP2-030200-W5 0105-heap2ss	Feb-99	1.8	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.81	
		Mar-00	DM*	1.8	1.0	nd	nd	14	nd	nd	nd	2,060	244	nd	nd	540	nd	nd	7.6	nd	nd	nd	8.56
		Mar-00(D)	ICP*	1.0	0.5	nd	nd	335	nd	nd	nd	2,210	226	nd	nd	568	nd	nd	7.1	nd	nd	nd	8.47
		May-01	-	-	nd	nd	-	nd	-	-	-	-	nd	-	-	nd	-	nd	-	-	-	7.99	
		Jul-02	-	-	-	nd	nd	25	nd	nd	nd	1,600	64	nd	nd	400	nd	nd	7.1	nd	nd	nd	-
		no sample (dry)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Standing Water Pad 2 - Southeast	HP2-030200-W2 HP2-030200-W2 0105-heap2se	Dec-98	0.7	0.7	nd	nd	35	nd	nd	nd	1,600	72	nd	nd	330	nd	14	nd	13.0	nd	13	8.60	
		Feb-99	1.6	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.82	
		Mar-00	DM*	1.0	0.6	nd	nd	29	nd	nd	nd	1,240	91	nd	nd	304	nd	nd	nd	nd	nd	nd	7.87
		Mar-00	ICP*	-	-	nd	nd	-	nd	-	-	nd	-	nd	-	nd	-	nd	-	-	-	-	
		May-01	0.8	nd	nd	nd	nd	41	nd	nd	nd	1,600	57	nd	nd	260	n	nd	nd	nd	nd	nd	7.92
		Jul-02	-	-	-	nd	nd	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Established Regulatory Limits																							
US MCL ^a																							